

GOOSE PASTURE POND
MONROE RESERVOIR PROPERTIES
2006 Supplemental Evaluation

Date of Survey: May 31, 2006

Biologist: Debbie King

Survey Objectives: Evaluate the fishery at the request of Monroe Reservoir Biologist under work plan number 204478.

Introduction: Goose Pasture Pond, formerly known as Weddle Pond, is located in Monroe Reservoir's Wildlife Sanctuary approximately 5 mi east of Bloomington off of State Highway 46. Goose Pasture Pond is located in the flood plain of the North Salt Creek of Monroe Reservoir. It is located in an open grassy field, and is accessible by walk-in only. There is ample shoreline access. The pond was drained and renovated in October 1990 (Andrews 1990). It was stocked with 3,000 bluegill and 600 largemouth bass in December 1990. In 2004, 75 surplus largemouth bass with an average length of 8.4 in TL were stocked (Jessup 2006, personal communication). Goose Pasture Pond is approximately 3 acres with a maximum depth of 8.5 ft.

This survey was conducted to assess the current status of the fishery at the request of the Monroe Reservoir Property Biologist.

Methods: A supplemental fish survey was conducted at Goose Pasture Pond on May 31, 2006. Sampling effort consisted of 0.27 h of pulsed DC night electrofishing with two dippers. Fish were measured to 0.1 in TL. Scale samples were taken from game species for age and growth analysis. District averages were used to estimate fish weight. Proportional Stock Density (PSD) was calculated for bluegill (Anderson and Neumann 1996). Water chemistry parameters were measured according to the Manual of Fisheries Survey Methods (Shipman, et al. 2001). Tier II aquatic vegetation sampling was conducted on July 19, 2006, according to Pearson (2003).

Summary: Water chemistry parameters were normal. The Secchi disk reading was 4 ft 10 in and the highest dissolved oxygen reading was 11 ppm at the surface. The aquatic vegetation survey found six species of submersed vegetation to a maximum depth of 8.5 ft. Brittle naiad was collected throughout the pond. Bushy and slender naiad followed with site frequencies of 85 and 80, respectively. Chara was sparsely scattered with a few monoculture beds noted. Eurasian watermilfoil, an exotic, and small pondweed was also collected. Densities of native species appear to be limiting the expansion of Eurasian watermilfoil. Creeping waterprimrose and common duckweed were also collected.

A total of 36 fish representing ten species was collected during the survey for an estimated weight of 6.31 lb. Bluegill represented 50% of the fish collected and ranged in length from 3.2 to 6.9 in TL. Bluegill growth was slower than average. A total of four redear were collected. The redear ranged in length from 4.7 to 7.1 in TL. Only three largemouth bass were collected, ranging in length from 5.0 to 10.8 in TL. One of the bass was age 3, potentially from the 2004 supplemental stocking. The other two indicate natural reproduction is occurring.

The remaining fish sampled included yellow bullhead, black crappie, green sunfish, gizzard shad, spotted bass, warmouth and white crappie. These species are common in Monroe Reservoir, indicating that fish migration has occurred during flood conditions. For this reason, no management recommendations are being made at this time.

Literature Cited:

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